A METHOD AND SYSTEM FOR IMPROVING THROUGHPUT OVER WIRELESS LOCAL AREA NETWORKS WITH A DYNAMIC CONTENTION WINDOW

ABSTRACT OF THE INVENTION

A method and system for increasing the overall network throughput over a wireless local area network (WLAN). Specifically, in one embodiment of the present invention, the dynamic selection of an initial value for a contention window in the Distributed Coordinated Function (DCF) mode is determined according to the load conditions over the WLAN in a method and system. Stations and access points within a WLAN monitor conditions within the network to establish an initial value for the contention window, also called a minimum contention window value, that is lower than that set by the IEEE 802.11 communication standard. Some factors to consider in determining the load conditions include but are not limited to the following: number of transmissions; number of receptions; and number of collisions.